

What is claimed is:

1. A data delivery system, comprising:

5 a server connected to data sources and adapted to transmit data to a

user;

a first link from the server adapted to transmit data to the user via a
first delivery path;

10 a second link from the server adapted to transmit data via a second
delivery path to the user, the second delivery path having a broader
bandwidth than the first delivery path; and

transmission control routines;

15 wherein, for each data entity to be transmitted to the user, the
transmission control routines select either the first path or the second path
for transmission, based on size of the data entity and preprogrammed
criteria.

2. The data delivery system of claim 1 wherein the first path is a land-based
path, and the second path is a satellite transmission path.

20 3. The data delivery system of claim 2 wherein queues are maintained for
data entities to be sent by the satellite path, and wherein the transmission
control routines negotiate with queue control routines regarding queue
capacity and queue use level as a part of the transmission path selection.

25 4. The data delivery system of claim 2 wherein the transmission control
routines encrypt data entities before transmission, and provide an encryption
key for transmission to the user.

5. The data delivery system of claim 2 wherein the transmission control routines are adapted, upon failure of one of the land-based and satellite delivery paths, to route all data entities by the remaining path.

5 6. The data delivery system of claim 2 wherein the transmission control routines are adapted to divide a data entity selected for satellite transmission into multiple smaller data entities before transmission.

10 7. The data delivery system of claim 6 wherein the transmission control routines, upon dividing a larger data entity into smaller data entities, prepares and transmits a division key to the user, the division key adapted for re-assembling the multiple entities back into the larger entity.

15 8. A broadband data transmission system comprising:
a high priority queue reserved for data entities requiring that data entities be sent in a successive fashion at or above a minimum rate;
a lower priority data entity queue; and
control routines adapted for dividing large data entities in the lower priority queue into multiple smaller data entities of a size that may be
20 transmitted interspersed with data entities from the high priority queue without causing the rate of transmission of the high priority entities to fall below the minimum rate.

25 9. The broadband data transmission system of claim 7 wherein the transmission system comprises a satellite transmission system.

10. The broadband data transmission system of claim 8 wherein, upon dividing a large data entity into multiple smaller data entities for transmission, the control routines prepare a division key for transmission to

a user, the division key adapted to aid in reassembling the multiple data entities back into the undivided larger data entity.

11. A method for transmitting data from a server to a user, wherein the
5 server is adapted to transmit either by a first path or by a second path, the second path having a broader bandwidth than the first path, comprising steps of:

10 (a) calculating a probable transmission time by the second path and by the first path;
(b) comparing the calculated transmission times; and
(c) selecting a path for transmission based on the comparison.

12. The method of claim 11 further comprising a step for encrypting data entities before transmission, and sending a decryption key to the user.

15 13. In a broadband data transmission system having a high priority queue reserved for first data entities requiring that the first data entities be sent in a successive fashion at or above a minimum rate, a method for transmitting a second data entity comprising steps of:

20 (a) dividing the second data entity into multiple portions, each portion small enough to ensure that it may be transmitted interspersed with first data entities without violating the minimum rate for the first data entities; and
(b) transmitting the divided portions of the second data entity interspersed with transmission of first data entities.

25 14. The method of claim 13 further comprising a step for preparing a division key with information about the facts of division of the second entity, and a step for causing the division key to be transmitted to a user.

PCT/US2012/046680